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EXAMINER

NILAND, PATRICK DENNIS

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETER GANSEN and
GUIDO HAGEL

Appeal 2009-1623
Application 10/792,269
Technology Center 1700

Decided:¹ February 23, 2009

Before EDWARD C. KIMLIN, CHARLES F. WARREN, and
PETER F. KRATZ, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is an appeal from the final rejection of claims 14-17, 19-26, 28, 3-32, and 34-38. Claims 27, 29, and 33 are objected to as being dependent upon a rejected base claim. Claims 14, 36, and 37 are illustrative:

14. A process for producing a freely demoldable foil from a polyurethane composition, comprising components (A)-(D), at least some of which are stored separately:

(A) a di- or polyisocyanate

(B) a compound containing hydrogen active in a polyurethane reaction;

(C) a catalyst or a system catalyzing the polyurethane reaction;

(D) a fine-particle oxide of a metal or of a metalloid, as additive; at a concentration above 3% by weight

in the absence of amine initiators,

the process comprising spraying the composition in one or more passes onto a smooth surface or into a mold, permitting it to react to completion, and demolding the foil after curing.

36. A demolded polyurethane foil with a thickness from 0.1 to 5 mm, which comprises a fine-particle oxide of a metal or of a metalloid, and which is free from amine initiators.

37. A polyurethane composition for production of foils, comprising the following components, at least some of which are stored separately:

(A) a di- or polyisocyanate

(B) a compound containing hydrogen active in a polyurethane reaction;

(C) a catalyst or a system catalyzing the polyurethane reaction;

(D) a fine-particle oxide of a metal or of a metalloid, as additive; at a concentration by weight above 5%;

without amine initiators.

The Examiner relies upon the following references as evidence of anticipation:

Schumann ('993)	EP 1095993 A2	May 2, 2001
Schumann ('243)	US 2005/0263243 A1	Dec. 2, 2005

Claim 31 stands rejected under 35 U.S.C. § 112, second paragraph.² Claims 17, and 36-38 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Schumann '993, and under 35 U.S.C. § 102(e) as being anticipated by Schumann '243. Claims 14-17, 19-26, 28, 30-32, and 34-38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schumann '993 and Schumann '243.

We have thoroughly reviewed each of Appellants' arguments for patentability. However, we find ourselves in complete agreement with the Examiner's reasoned analysis and application of the prior art, as well as his cogent and thorough disposition of the arguments raised by Appellants. Accordingly, we will sustain the Examiner's rejections for essentially those reasons expressed in the Answer, and we add the following primarily for emphasis.

We consider first the Examiner's rejection of claim 31 under § 112, second paragraph. It is the Examiner's position that the claim recitation "more than 60% of primary OH groups" is indefinite because "[i]t is unclear if the percentage is based on weight of the compound or the number of

² The rejection of claim 31 under 35 U.S.C. § 112, first paragraph, has been withdrawn.

functional groups such as those well known compounds which have mixtures of functional groups such as SH and OH groups or NH and OH groups" (Ans. 3, fourth para.). Appellants submit that claim 31 depends on claim 21 which "limits component (B) to polyols, which by definition are polymers with alcohol or "OH" (Br. 11). However, Appellants have not refuted the Examiner's position that the term "polyol" does not exclude the presence of functional groups other than OH and that "[p]olyols having more than OH functional groups are well known in the art and encompassed by the language of claims 21 and 31" (Ans. 7, last para.).

We next consider the Examiner's § 102 rejections. Appellants contend that Schumann '243 "should not be recognized as a proper reference under either 35 U.S.C. §§ 102(e) or 103." Appellants point out that Schumann '243 "has a filing date (April 25, 2005) which is after the filing date of the present application (March. 4, 2004)" (Br. 12, third para.). Appellants further note that Schumann '243 is a continuation-in-part of USSN 09/698,404, filed October 27, 2000, which appears to be similar to Schumann '993. However, as explained by the Examiner, the fact that Schumann '243 is a continuation-in-part of another application does not invalidate it as a reference under § 102 or § 103. Appellants must point out which specific portions of Schumann '243, which are relied upon by the Examiner in support of the rejection, are not part of the disclosure in the parent application. Appellants have failed to point out the specific, relevant portions of Schumann '243 that are not entitled to the filing date of the parent application, namely, October 27, 2000.

Appellants also contend that "the Schumann references do not describe or suggest a polyurethane foil which is peeled off a mold or a flat

surface" (Br. 13, first para.). Appellants submit that the polyurethane backing material 4 of Schumann is not a foil. However, we agree with the Examiner that Appellants have not defined the term "foil" in such a way that distinguishes it over the cured film of Schumann which comprises polyurethane materials within the scope of the appealed claims at the same thickness. Appellants seek a broader definition of the term "foil" than the typical thin metal sheet, but we perceive no patentable distinction between the thin polyurethane foil presently claimed and the thin cured polyurethane coating disclosed by Schumann. Also, as correctly pointed out by the Examiner, the appealed claims do not define peeling the foil off a mold or flat surface or a foil having a high tensile strength or a fully cured polyurethane material. Furthermore, claim 36 is directed to a foil product whereas claims 37 and 38 define a polyurethane composition, and not a process of freely demolding a film. The Examiner properly notes that Appellants have not established that the polyurethane compositions fairly taught by Schumann do not exhibit properties that are suitable for demolding freely and making a foil.

Appellants also submit that Schumann teaches the use of amine initiators while the claimed product and compositions are free from amine initiators. However, we agree with the Examiner that Schumann only teaches that amine initiators **may** be used as optional components of the composition, and Appellants have not refuted that Schumann **exemplifies** polyurethane compositions that are, indeed, free of amine initiators.

Turning to the § 103 rejection, we agree with the Examiner that Schumann meets the claim 14 requirement of permitting the polyurethane composition to react to completion. Schumann teaches that the polyurethane

composition 4 cures to the backing material and, although the composition is not cured to completion in the heat tunnel, the appealed claims do not require a complete curing. We agree with the Examiner that the claimed "react to completion" is effected in the heat tunnel of Schumann in the sense that the partial cure is a complete reaction under the conditions present in the heat tunnel. In the words of the Examiner, "the claim language 'permitting to react to completion' can only be interpreted as allowing the thing to react as far as it will under the circumstances it is in, considering such factors as heat, viscosity of the matrix, catalyst presence, stoichiometry, and other factors which influence polymer reactions" (Ans. 13, penultimate sentence). Furthermore, Schumann teaches that complete curing is effected after at least three days ([0031]), and claim 14 is sufficiently broad to encompass demolding the foil **before** the reaction is completed. Also, polyurethane composition 4 of Schumann is demolded from web 3 after it passes through the heating tunnel 31.

As a final point, we note that Appellants base no argument upon objective evidence of nonobviousness, such as unexpected results, which might serve to rebut the inference of obviousness established by the applied prior art.

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner's decision rejecting the appealed claims is affirmed.

Appeal 2009-1623
Application 10/792,269

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(effective Sept. 13, 2004).

AFFIRMED

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